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MEMORANDUM FOR FIPS Points of Contact
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From: Harry S. White, Jr. *Harry S. White, Jr.*
Associate Director for ADP Standards

Subject: House of Representatives Report No. 94-1746

Attached for your information and use is House Report No. 94-1746, entitled "Administration of Public Law 89-306, Procurement of ADP Resources by the Federal Government". Currently, each of the organizations cited in the Recommendations Section (pages 15 and 16) are preparing responses to Congress on these items.

Attachment



Union Calendar No. 870

94th Congress, 2d Session - - - - - House Report No. 94-1746

ADMINISTRATION OF PUBLIC LAW 89-306,
PROCUREMENT OF ADP RESOURCES
BY THE FEDERAL GOVERNMENT

THIRTY-EIGHTH REPORT

BY THE
COMMITTEE ON GOVERNMENT
OPERATIONS

together with
ADDITIONAL VIEWS



OCTOBER 1, 1976.—Committed to the Committee of the Whole House on the
State of the Union and ordered to be printed

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(II)

LETTER OF TRANSMITTAL

HOUSE OF REPRESENTATIVES,
Washington, D.C., October 1, 1976.

HON. CARL ALBERT,
Speaker of the House of Representatives,
Washington, D.C.

DEAR MR. SPEAKER: By direction of the Committee on Government Operations, I submit herewith the committee's thirty-eighth report to the 94th Congress. The committee's report is based on a study made by its Legislation and National Security Subcommittee.

JACK BROOKS, *Chairman.*

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Union Calendar No. 870

94TH CONGRESS } 2d Session }	HOUSE OF REPRESENTATIVES {	REPORT No. 94-1746
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ADMINISTRATION OF PUBLIC LAW 89-306, PROCUREMENT OF ADP RESOURCES BY THE FEDERAL GOVERNMENT

OCTOBER 1, 1976.—Committed to the Committee on the Whole House on the State of the Union and ordered to be printed

Mr. BROOKS, from the Committee on Government Operations,
submitted the following

THIRTY-EIGHTH REPORT

together with

ADDITIONAL VIEWS

BASED ON A STUDY BY THE LEGISLATION AND NATIONAL SECURITY
SUBCOMMITTEE

On September 28, 1976, the Committee on Government Operations approved and adopted a report entitled "Administration of Public Law 89-306, Procurement of ADP Resources by the Federal Government." The chairman was directed to transmit a copy to the Speaker of the House.

I. INTRODUCTION

The annual Automated Data Processing (ADP) costs in the Federal Government are estimated to range between \$4 and \$10 billion. These costs include the procurement of ADP hardware, maintenance, and services, as well as personnel and other operational costs. These estimates, however, do not generally include Federally financed ADP expenditures by Federal grantees and contractors. Also, they may well not include all Federal expenditures on "special purpose" ADP equipment which is generally designed as an integral part of non-ADP operations. If the costs of these additional functions were included, Federal annual ADP costs could easily exceed \$15 billion. This

(1)

means that current Federal ADP expenditures may amount to approximately 4 percent of the entire Federal budget.

The magnitude of these costs compels the Congress to reevaluate the manner in which we perceive and manage Federal ADP operations in the Federal Government, and, more importantly, how these operations impact upon the budgets and management of executive agencies.

Traditionally, computers have been embraced by government managers as a revolutionary tool for improving efficiency and conserving resources. As a result, these manager's expectations have all too often exceeded the reality of the computer's capability to solve their problems. The level of current Federal expenditures on ADP resources must compel us to reexamine the true impact of computers on government operations. Since we are now devoting such a large share of our Federal budget to ADP resources, we need to scrutinize more carefully whether these expenditures are justified from a cost/benefit standpoint. Equally important, however, is the question whether acquisition of ADP resources is necessary to carry on an essential program or whether such acquisition will foster non-essential activity simply because the computer is available.

Both of these issues can have such an impact on government agencies' operations that they require a more careful scrutiny of ADP procurement and operations than is now being conducted within the Government. Automatic data processing equipment can no longer be viewed as a mere tool but must now be treated in the same way as other major programs and, as such, receive the attention of top management.

The primary means for providing this direction by top management lies in the effective administration of Public Law 89-306 (The Brooks Act). This Act, while directed primarily toward the procurement of ADP resources, in effect, compels agencies to examine their needs and uses of ADP if they are to achieve the economies and efficiencies intended by the Act.

II. HEARINGS

The Government Operations Committee, through its Subcommittee on Legislation and National Security, conducted three days of hearings on June 28 and 29, and July 1, 1976, in which procurement and utilization under the Brooks Act were reviewed. Preparatory to these hearings, the Subcommittee devoted several months to reviewing the administration of this Act by the Office of Management and Budget (OMB), the General Services Administration (GSA), and the National Bureau of Standards (NBS). Considerable information was obtained from these agencies regarding their role in administering the Act, as well as information relating to Federal user agencies' ADP procurement and use. In addition, data was obtained directly from the user agencies on their ADP inventory and its acquisition.

At the hearings, testimony by representatives of OMB, GSA, and NBS provided the Subcommittee with additional information concerning their activities under the Act. The General Accounting Office (GAO), in turn, presented a ten-year summary covering the implementation of the Act. Finally, the Computer and Business Equipment Manufacturers' Association and the Computer Industry Association testified as to the ADP industry's position regarding the implementation of the Act.

A review of this information and testimony has disclosed that the Brooks Act has been neither administered nor implemented in accordance with the intentions of Congress:

- GSA has repeatedly authorized noncompetitive procurements which were not adequately justified.

- GSA has failed to enforce regulations and restrictions in ADP procurement authority delegated user agencies.

- GSA has not provided adequate management guidance to user agencies.

- OMB has failed to establish concise, clearcut policy.

- OMB has not provided adequate direction in the enforcement of those policies it has established.

- NBS has failed to provide necessary hardware and software standards.

- Federal user agencies have consistently failed to cooperate with GSA.

- Federal user agencies have shown a general reluctance to adhere to the purpose and intent of the Brooks Act.

Under the Brooks Act, GSA has the authority for procuring ADP resources required by Federal user agencies. GSA may either procure those ADP requirements which a user agency specifies or delegate to an agency authority to procure under such restrictions and conditions as GSA specifies. The Act does not permit GSA to impair or interfere with an agency's determination of its requirement. This cannot be interpreted, however, as preventing GSA from determining the best means for an agency to fulfill its ADP requirements. A dispute between GSA and a user agency is to be resolved by OMB.

III. SURVEYS OF ADP PROCUREMENTS

In a survey conducted by the Subcommittee of delegations of ADP procurement authority granted by GSA, it was found that in Fiscal Year 1975 only 36 percent of the systems required were procured in a fully competitive manner.¹ The balance were noncompetitive—sole source, make and model, brand name or equal. This low percentage of competitive procurements is clearly inconsistent with the goals and objectives of the Brooks Act and reflects a decline in the level of competition from historic percentages developed by the Subcommittee of user agency procurements over an eight year period. This latter survey showed that an average of 60 percent of all systems procurements were competitive during that eight year period. What is particularly disturbing about this sharp decline in the level of competition is the fact that, as GSA admitted to the Subcommittee, noncompetitive procurements are more costly to the Federal Government than competitive procurements. According to the GSA, since enactment of Public Law 89-306, over \$681 million in cost avoidance has been achieved in 302 competitive ADP contracts.

It was pointed out at the hearing that the Brooks Act has stimulated a greater participation in the Government market by ADP manufacturers than in the commercial market. Whereas, 70 percent of the commercial computer market is dominated by one firm, that firm controls only approximately 30 percent of the Government market. While the Brooks Act can justifiably take credit for this, these statistics do not represent true competition in the sense that they do not reflect whether competition occurred in any specific procurement.

¹ This percentage does not include the large number of noncompetitive delegations granted by GSA under Temporary Regulation, E-32, relating to renewals of leased equipment rented under the ADP Schedule. If these procurements had been included, the percentage of competitive procurements would have been even lower.

IV. BASIC CAUSES OF NONCOMPETITIVE PROCUREMENTS

The basic causes for noncompetitive procurements are lack of (1) adequate justifications for ADP acquisition, (2) long-range planning, (3) standards, (4) high level languages, (5) utilization reviews, and (6) use of functional specifications.

LACK OF ADEQUATE JUSTIFICATION

GAO has documented several cases in which GSA granted procurement delegations which had not been fully justified by user agencies. Among these were procurement requests by the Department of Agriculture, Veterans' Administration, and the Social Security Administration. Several reasons appear to exist for GSA's actions. Foremost, in the Committee's view, is GSA's lack of resources to examine in depth an agency's justification for a noncompetitive procurement. To conduct an adequate in-depth review of a justification for a major ADP system would require the expenditure of hundreds of man-hours by technically qualified personnel. Generally, GSA lacks sufficient manpower to devote that amount of time to such reviews. The Federal Computer Performance Evaluation and Simulation Center (FEDSIM) does possess the capability to perform such services but its resources are so limited that it is unable to provide a significant degree of timely assistance in this area.

In addition, GSA, on occasion, appears to grant a user agency a delegation of procurement authority because of the latter's prestige or dominance in the bureaucratic structure of government. In essence, this prestige or dominance permits an agency to exercise influence over another agency without taking any apparent overt action. This influence stems from the mission of the agency and the support it can garner from the higher levels of government. GSA, unfortunately, ranks below many other agencies in the world of bureaucracy. As a consequence, it is unable, standing alone, to resist pressures from a more dominant source if such source signals GSA that it intends to exert pressure concerning a particular request.

Even worse, there have been occasions where user agencies have refused to cooperate with GSA when the latter sought fuller justification for noncompetitive procurement requests. In recent months, Departments of Interior, Commerce, Transportation, and HEW have, in one way or another, challenged GSA's authority to obtain additional documentation for procurement requests. These challenges have been based on the requirements section of the Brooks Act which prohibits GSA from questioning an agency's requirements. The validity of these challenges are clearly without legal support under the law. If an agency disagrees with GSA regarding justification for a particular procurement, the Act provides that the dispute be brought to OMB for resolution. In the past neither GSA nor the agencies have exercised this right to appeal to any extent.

The Committee is very disturbed over an apparently increasing trend of user agencies to interpret the law to suit their own purposes. Whether intentional or not, this type of behavior will have the effect of subverting the effectiveness of Public Law 89-306. If GSA were to be denied the right to require full documentation for ADP procurements, the objectives of fully competitive procurements under the Act would be effectively destroyed. Federal agencies strongly resisted enactment of the Brooks Act. Since passage, they have shown little willingness to comply voluntarily with the law. The low level of fully competitive procurements further illustrates their non-cooperative state of mind. Either user agencies must learn to comply with the full thrust of the Act or OMB must take all necessary action to make them do so. In particular, OMB must make it clear to every user agency that its right to determine its own ADP requirements under the Act does not include the right to dictate a specific brand name of equipment as its requirements or refuse to supply GSA with appropriate feasibility studies. In addition, GSA must be given the resources to perform adequate reviews of user agencies' procurement justifications.

GSA, in turn, must take a more aggressive position when dealing with user agencies. Being fully cognizant of the bureaucratic facts of life, however, it has to be realized that GSA will not be able to assume this new role unless OMB fully supports it.

The manner in which the Brooks Act is being administered is unacceptable. If this continues, the Act's effectiveness will become seriously jeopardized at a cost of millions of dollars to the taxpayers.

LACK OF LONG-RANGE PLANNING

The second major cause for noncompetitive procurements is the failure to prepare effective long-range plans. These plans must be based upon a user agency's projected missions and programs for a period of five or more years, and not merely a guesstimate of future ADP needs divorced from the agency's missions and programs. Once these plans have been prepared, an agency should develop the ADP requirements necessary to support its mission and program needs. At this stage, the ADP resources should be procured on a fully competitive basis through the use of functional specifications. It is noted that several witnesses at the hearings supported functional specifications for major systems procurements. GSA is in the process of issuing regulations which, while still containing many shortcomings, encourage the use of functional specifications. OMB, if it effectively enforces its action, has gone a step further by issuing Circular A-109, which requires all major systems, including ADP systems, to be procured by means of functional specifications.

Assuming that an agency has planned effectively, the ADP resources to be acquired should fully support the agency's missions and programs for the duration of the plan and should obviate the necessity for interim upgrades, add-ons, and replacement systems. The only apparent exception should be in those instances where new or increased responsibilities have arisen which an agency could not have reasonably predicted at the time the original system was procured. The establishment of ADP requirements at the time a plan is developed is not meant to imply, however, that all hardware and software must be procured at

the beginning of the plan. Instead of acquiring unneeded capacity in the short run, contracts can be awarded which call for phased installation of equipment over a period of years.

In effectively implementing this planning system, OMB must assume primary responsibility for its success. Not only must it issue clear and concise policy guidance, but it must also insure that such policy is adhered to by user agencies. The success of this planning concept is equally dependent upon Congress' approving funds for ADP procurements which it supports and which are consistent with agency plans. Further, in order for this planning and procurement role to be effective, a need exists to develop line item appropriation authority for ADP.

At the present time, it is difficult for Congress and OMB to monitor effectively agency expenditures or requests for expenditures for ADP because they are buried in other funding requests. There are those who argue that ADP is merely a tool designated to assist agencies in fulfilling mission needs. As a consequence, it is maintained that singling out ADP for separate consideration would distort the budgetary process. In actuality, however, current and prospective usage of ADP is so interrelated with agency policies, planning and programs that fundings of ADP requirements can become as important as funding of programs themselves. In addition, ADP expenditures represent such a significant percentage of the overall budget that effective management of budgetary priorities requires that such expenditures be singled out for separate consideration.

Only if this planning concept is faithfully pursued will the spirit and letter of the Brooks Act be fully realized. The Act requires the economic and efficient procurement of ADP resources. This can only be realized if, in the long run, procurements are conducted in a fully competitive manner.

It is recognized, however, that under the most favorable circumstance it will take time to implement effectively both a workable planning process and the functional specification concept. Conceivably, its objectives may never be fully realized. Pending successful implementation, many steps can be initiated immediately which will contribute significantly to the achievement of fully competitive ADP systems procurements.

LACK OF STANDARDS

First and foremost is the development of meaningful hardware and software standards. Under the Brooks Act and Executive Order 11717, NBS is charged with the responsibility for developing ADP standards. At the hearings, GAO expressed serious concern about the lack of progress being made by NBS in the development of standards. This concern of GAO was prompted, in large part, by its recognition that standards are essential to the achievement of full competition and to the saving of large sums of money by the Government. To date, NBS has only developed to a limited extent standards necessary to fully implement the Act, even though it acknowledged at the hearings that lack of standards seriously impedes effective competition. As the Computer Industry Association testified at the hearings, NBS has developed no meaningful hardware standards and only a relatively few software standards for ADPE. This sentiment was echoed by GSA.

Perhaps the most dramatic example of this failure is NBS' ten-year effort without success to develop Input/Output Interface standards. These standards, which would enable peripheral devices of different manufacturers to be connected to the same central processing unit, would, as GSA has informed the Committee, greatly enhance the effectiveness in achieving competition in both systems and peripheral procurements. Yet, NBS has not aggressively pursued the development of these standards because it apparently has been committed to the adoption of voluntary standards developed under American National Standards Institute (ANSI) procedures. This voluntary process under ANSI is generally sound so long as it does not unduly impede the development of worthwhile standards. When, however, as in the case of the Input/Output Interface standards, conflicting interests serve to preclude the timely adoption of a standard, NBS has the obligation to develop Federal Standards. In response to a Subcommittee question, NBS stated that development of Input/Output standards is essential in order to provide more effective competition. Furthermore, at the hearings NBS testified that additional delay in the adoption of voluntary Input/Output standards will compel it unilaterally to adopt Federal standards.

It has been alleged that the development of ADP standards will preclude the Government from taking advantage of technological advances and perhaps even stifle the development of such advances. If, in fact, there is any validity to this allegation, the pitfalls suggested therein can be avoided by NBS maintaining constant vigilance to assure that standards are modified in accordance with advances in technology.

Even in those case in which standards have been adopted, their implementation has not been effectively enforced. NBS has informed the Subcommittee that it has no data on agency compliance with standards and, furthermore, maintains that enforcement of standards presently resides in each individual agency. GSA has incorporated most Federal standards into its procurement regulations, but it has made little or no effort to see that they are complied with. OMB, in turn, last exercised its policy guidance role in this area in 1966 when it issued Policy Guidelines to NBS. Since that time, OMB has neither updated these guidelines nor taken action to see that they are followed. This means that even if standards are developed in the future, such development will be of little value unless an effective means of enforcement is developed. While NBS has indicated that centralizing enforcement responsibility will improve compliance, it maintains that it is not an appropriate agency to perform this function. In consequence, OMB must establish procedures for the effective enforcement of ADP standards, and designate GSA as the agency responsible for enforcing compliance with such standards.

LACK OF HIGH LEVEL LANGUAGES

Another fundamental course of action which must be adopted is the requirement that Federal user agencies write their ADP programs in higher level languages. Writing programs in higher level languages contributes to effective hardware competition by eliminating most of the costs associated with converting software from one brand of equip-

ment to another brand. Increasingly, software conversion costs are dictating that specific ADPE be procured, thereby preventing full competition. The survey conducted by the Subcommittee of delegations of procurement authority for FY 1975 revealed that a large number of noncompetitive procurement requests were justified on the grounds of avoiding excess conversion costs. This clearly suggests that a sizable share of existing programs have been written in lower level languages and that there is little evidence of effective central direction in the Government encouraging conversion to higher level languages.

The Government's primary effort to meet this problem has been to concentrate on the development of higher level languages. Even here, however, success has been limited. Cobol was adopted as a federal standard in 1968; yet, the continuing large number of noncompetitive procurement requests justified on the basis of avoiding conversion costs suggests that the standard has not been widely complied with. Moreover, even if user agencies have written programs in Cobol, it is doubtful how successful this will be in reducing the conversion problem. As noted earlier, there is no centralized enforcement of standards by NBS or any other agency. This means that a user agency may adopt Cobol but employ unique features which will impede conversion. Furthermore, even though NBS has been developing a Fortran standard for several years, none has yet been adopted. Only when standard high level languages are developed and their use enforced will a barrier to effective competition be eliminated.

Standardization of Cobol and Fortran alone will not be enough. As GSA informed the Committee, the establishment of large data base applications, which include considerable expense for software, storage, and training has created a new problem. There is no standard data base management system or approach. Each manufacturer and service company has its own system. Without a standard for data base management systems, conversion problems will continue. In the absence of standards for high level languages and data base management systems, the policy should be established that, when a user agency acquires a new ADP system, it will generally be required to absorb software conversion costs and not include those costs in determining what equipment will be acquired.

LACK OF UTILIZATION REVIEWS

Another factor contributing to the high level of noncompetitive ADP procurements is the failure of user agencies to effectively and efficiently utilize their ADP resources. The economic benefits of competitive procurements of ADP resources under the Brooks Act are dependent upon the efficient utilization of such resources. By means of such utilization, noncompetitive interim upgrades, add-ons and replacements can be minimized. And, even in those cases where increased capacity for an interim period is required in spite of efficient utilization, such can frequently be obtained through the competitive procurement of peripherals, minicomputers or service contracts.

At the hearings, the GAO cited many examples of agencies' failures to properly utilize their equipment. Perhaps the most flagrant example was that of the Social Security Administration which was operating equipment at 50 percent of capacity and running second

generation programs on third generation equipment. In addition, the GAO also described procurements by the U.S. Department of Agriculture and the Treasury Department which were not supported adequately by utilization reviews. In each of these, costly equipment was acquired through noncompetitive procurements.

The GAO reported that where inadequate utilization was uncovered, as in the above examples, such inadequacy was found to be caused by one or more of the following: improper design, inefficient application, or operational deficiencies. In each case, of course, the user agency must be held primarily accountable for these inefficiencies. However, OMB, GSA, and NBS must share a portion of the responsibility for this state of affairs: OMB for failing to provide policy guidance and overall leadership, GSA for failing to challenge questionable justifications, and NBS for failing to develop criteria for measuring systems performances. Yet, even taking into account the deficiencies of these three agencies, prudent management would dictate that user agencies themselves should strive to optimize their ADP utilization in order to achieve a high level of economies and efficiencies in their programs. Their failure to do so is another example of their lack of interest in supporting the objectives of the Brooks Act or in making the best use of the taxpayers' dollars.

LACK OF USE OF FUNCTIONAL SPECIFICATIONS

Finally, another step that can be taken to increase competitive systems procurements in the short run is the use of functional specifications. At present, virtually all ADP procurements are made on the basis of restrictive specifications. Earlier, functional specifications were discussed in terms of their use in conjunction with long-range systems plans. However, even in the absence of long-range plans, agencies should be required to use functional specifications when acquiring a new system. Clearly, the promulgation of OMB Circular A-109 and GSA's pending Federal Procurement Regulation both call for the use of functional specifications in ADP systems procurements and are, therefore, consistent with this proposal.

V. INTERIM UPGRADES

The adverse impact of the above six causes (lack of adequate justification, long-range planning, standards, high-level languages, utilization reviews, functional specifications are most readily seen in the case of the significant number of noncompetitive interim upgrades, add-ons, and replacement systems that are authorized each year. Until the above causes for noncompetitive procurements are eliminated user agencies will undoubtedly continue to request large numbers of delegations for such noncompetitive procurements. Before GSA grants such a delegation, however, it should require the requesting agency to document that its existing system is only operating essential programs and that all steps have been taken to optimize the efficiency of the programs and systems. In addition, GSA should not grant a delegation for a noncompetitive procurement unless the user agency documents that it cannot meet its needs through the competitive procurement of minicomputers or service contracts.

At the present, GSA is in the process of establishing a new Teleprocessing Services Program (TSP) which is intended to permit user agencies to contract competitively for ADP services. Under this program, GSA will contract with a large number of ADP service firms throughout the country. Once operational, it will be mandatory upon agencies to acquire ADP services under this program unless GSA grants a waiver. If properly implemented, the TSP program could reduce significantly the number of noncompetitive interim upgrades, add-ons, and replacement systems. However, the Committee is concerned that these hoped for benefits will not be fully realized because of GSA's failure to date to effectively manage the program. Among these failures have been a lengthy delay in issuing the RFP, the development of inadequate procedures governing its use, and an undue delay in awarding contracts. Unless GSA immediately moves to correct these failures, the success of the TSP program will be jeopardized.

In those cases where GSA determines that a noncompetitive interim upgrade, add-on, or replacement system is justified, it should grant a delegation only on the condition that the user agency has given a firm commitment that it will go competitive within a time period not exceeding two years. Needless to say, GSA must strictly enforce this time limit, a role it has not assumed to date.

VI. PROCUREMENT OF SMALLER DOLLAR VALUE ITEMS

The discussion to date has been directed primarily to the procurement of major ADP systems. Implicit in such discussion has been the realization that procurement of major systems by means of functional specifications can be more time consuming and costly than a noncompetitive procurement or an equipment specification procurement. However, the benefits to be realized through such fully competitive procurements will in the long run far outweigh short-term disadvantages.

By way of contrast, immediate cost benefits and time savings can be realized through the institution of simplified procedures for procurement of smaller dollar value items.

The Subcommittee survey of fiscal year 1975 procurement delegations revealed that 56 percent of all delegations were for procurements valued at \$250,000 or less. Most items procured in this category were minicomputers, peripherals, software, and maintenance where highly competitive markets exist. The relatively low-dollar volume involved in such procurements, as well as the existence of competition, has meant that GSA has had to devote a disproportionate amount of its limited resources to small dollar item procurements which are least vulnerable to noncompetition. By the same token, the resources of user agencies have been unfairly taxed by their being required to follow the same procedures for small dollar items as they must for major procurements.

To conserve the resources of both GSA and user agencies, new procedures should be established whereby user agencies could procure ADP items below \$250,000 without the need to obtain a delegation of authority from GSA. These procedures should only be implemented, however, if certain safeguards are established. Full competition must be preserved and clearly documented in user agency files. CPU's and systems may not be procured, except for minicomputers. Most importantly, GSA must maintain active oversight over such procurements, including periodic audits, to insure compliance with the terms of the program. Serious breaches of these procedures by a user agency must lead to GSA's suspension of such agency's further authority to use these procedures.

VII. ADP FUND

The emphasis of these hearings has been upon the procurement of ADP resources under the Brooks Act. It is only fitting, then, that reference be made to the operation of the ADP Fund which was created by the Act and was to be administered by GSA.

When the Fund was initially established, it was contemplated that its role in ADP procurement would be more prominent than it is today. In a report issued in October, 1975, the GAO indicated that a primary cause for the restricted use of the Fund has been the limited financial resources provided for it. This would appear to be short-sighted since many worthwhile programs could be administered effectively through the Fund with potential economic savings to the Government.

Among such programs would be the Opportunity Buy Program and Requirements Contracts. The former program enables GSA to purchase equipment at a significant economic saving for utilization by a user agency when the latter is financially unable to make the purchase itself. In the case of requirements contracts, the Fund could guarantee the acquisition of minimum quantities of ADPE at large potential cost savings.

The Fund can also be used effectively to support the TSP Program, discussed earlier, Data Processing Centers, and Multiyear Leasing. With regard to the latter, many are advocating enactment of Multiyear Leasing legislation which would permit the leasing of equipment for several years although only obligating payment on a year-by-year basis. GSA already has legal authority to enter into multiyear leases. Therefore, if the Fund were fully capitalized, GSA would have the financial capability to take advantage of multiyear leasing without the need to enact such legislation.

Finally, it is anticipated that the Fund could be used as a central procurer for the acquisition of software products for Government-wide use. Through such purchase significant savings can be achieved.

There are those who advocate that the Fund be the sole procurer of all Government ADP resources, including large systems. Given GSA's limited resources and the knowledge and expertise residing in user agencies, relating to ADP, the Committee does not believe that it would be beneficial at this time to centralize all procurements in the Fund. Particularly, in the case of large systems procurements, it would seem far more reasonable to have the user agencies procure their needs under delegation from GSA rather than for GSA to shoulder the entire burden for such procurements through the Fund. In turn, this will free GSA to devote a greater share of its limited resources to increasing its oversight of major procurements to the end that they be fully justified and competitive.

VIII. CONCLUSION

Over ten years ago, the Committee, anticipating the key role that computers would play in the operations of Government, recommended and Congress enacted Public Law 89-306 (The Brooks Act) which established a framework for the economic and efficient procurement and utilization of ADP resources. The growth in the expenditures of and use made of computers have far exceeded the levels anticipated by the Committee.

The magnitude of this growth prompted the Committee to conduct an investigation and to hold hearings into the administration of the Act. The Committee found that, overall, the Act while providing significant benefits has neither been satisfactorily administered nor effectively implemented to its fullest potential. The Act has opened the Government market more widely to the ADP industry than to the commercial market. Millions of dollars have been saved in ADP procurements. However, the low level of fully competitive ADP procurements coupled with the apparent lack of effective utilization of ADP resources will, if allowed to continue, ultimately result in seriously jeopardizing the effectiveness of the Brooks Act at a cost of millions of dollars annually to the taxpayers.

GSA, OMB, NBS, and the user agencies must all share responsibility for this situation: GSA for failing to administer the Act effectively, OMB for failing to provide adequate policy direction, NBS for failing to establish standards, and most significantly the user agencies who, having the most to gain from the Act, has resorted to every possible means to avoid full compliance with it. If the full benefits of the Act are to be achieved, GSA, OMB, NBS, and the user agencies must join together in a commitment to fully support and adhere to the provisions of the Act.

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IX. RECOMMENDATIONS

1. While a user agency has the right under the law to determine that it has a need for ADP requirements, OMB must issue clear policy guidelines upholding GSA's authority to determine the array of ADP resources which would best meet such requirements.

2. Disputes between GSA and user agencies over their respective rights should be referred to OMB for immediate resolution, as provided for in Public Law 89-306.

3. OMB must establish concise, clearcut policies providing direction in the administration and enforcement of Public Law 89-306 by GSA, NBS, and, in particular, the user agencies who, to date, have demonstrated a general reluctance to comply with the law.

4. GSA must provide concise and clearcut guidance in its administration of Public Law 89-306 through the issuance and enforcement of regulations and restrictions imposed in the delegation of procurement authority.

5. Federal user agencies must be required to develop long-range plans governing ADP needs and equipment expectations based upon realistic utilization reviews.

6. ADP systems must be procured competitively in accordance with functional specifications except in unusual instances when consideration of national interest may require reliance upon equipment specifications.

7. Interim upgrades, add-ons, and replacement systems should be avoided except in those cases where new responsibilities have arisen which a user agency could not have reasonably predicted at the time the original system was procured.

8. Where GSA authorizes a non-competitive interim upgrade, add-on, or replacement system, it should do so only upon the condition that the user agency give a firm commitment that it will go competitive within a period not exceeding two years—such commitment being strictly enforced by GSA.

9. Interim upgrades, add-ons, or replacement systems should only be authorized in those cases where additional requirements cannot be met through the procurement of minicomputers or service contracts.

10. NBS must develop necessary hardware and software standards to insure maximum economies and efficiencies in the procurement and utilization of ADP resources.

11. OMB must establish procedures for the effective enforcement of ADP standards and designate GSA as the agency to enforce compliance with such standards.

12. All ADP programs should be converted to higher level languages except in those cases where OMB specifically determines that the national interest requires otherwise.

13. Software conversion costs should not be considered in the evaluation of bids for the procurement of ADP systems except to the extent that such costs involve direct out-of-pocket costs for program conversion.

14. Research should be undertaken, pursuant to OMB's direction, aimed at the development and use of management information systems which contribute to competitive ADP procurements and utilization.

15. Federal user agencies should be authorized to procure ADP resources, excluding CPU's, below \$250,000 without specific delegation of authority from GSA as long as the agencies document that the procurements are fully competitive. Procurement of CPU's should always require a delegation from GSA.

16. GSA should be granted additional resources to enable it to more effectively administer Public Law 89-306.

17. FEDSIM should be granted additional resources to enable it to increase its level of assistance to GSA and user agencies.

18. The ADP Fund should be adequately funded to support the TSP program, Data Processing Centers, Multiyear Leasing, Opportunity Buys, Requirements Contracts, and Government-wide software products.

19. Congress and OMB should direct that each agency request appropriations for all ADP expenditures (hardware, software, maintenance operations, grantees, and contractors) under a single line-item.

ADDITIONAL VIEWS OF HON. SAM STEIGER

Our Committee, over the years, has played an important role by insuring the efficient and economic procurement and utilization of ADP resources by the Federal Government. This report most certainly will give needed new direction in this area. Because of the importance of this report, it is important that some additional views be presented.

The report primarily focuses on the apparent statistical decline in the number of competitive ADP procurements. While this is significant as a trend, the causes, not just the symptoms must be attacked. A management system must be developed to capitalize on and harness for greater productivity the basic strengths of the competitive free enterprise system to bring the vast benefits of computer technology to bear in solving the many problems of government. If the Subcommittee fails to broaden its focus it will provide the Executive Branch a directional bias which, if not clarified, could prevent the government from realizing the maximum benefits from computer technology and competition.

The specific sections for which additional views are offered are Section IV, Basic Causes of Noncompetitive Procurements; and Section IX, Recommendations.

SECTION IV, BASIC CAUSES OF NONCOMPETITIVE PROCUREMENTS

Section IV identifies the basic causes for noncompetitive procurements as the lack of (1) adequate justification for ADP acquisition, (2) long-range planning, (3) standards, (4) high-level languages, (5) utilization reviews, and (6) use of functional specifications. In addition to these causes identified in the report, there are several additional factors which would bring us even closer to the basic problems that exist in the procurement and use of computers in the government today. These to some extent have been previously highlighted by the Blue Ribbon Panel on Defense Procurement and the Commission on Government Procurement and are as follows:

The excessive cost, time, and complexity of today's authorization and acquisition process for computers are well documented and understood throughout both the Executive and Legislative Branch. We have seen that the current procurement process can take from three to six years and can incur procurement costs that are greater than the cost of the equipment. Failure to acknowledge and address this adverse factor impacts not only the goal of maximizing competition but substantially reduces the effectiveness of the use of computer technology in government. Major effort is required to improve and streamline the procurement process. Failure to

do so will continue to deny the government and the taxpayer the full benefits of the competitive free enterprise system.

The second issue is the growing age of the government's computers and its effect on governmental productivity and responsiveness. Again we can look at the Defense Blue Ribbon Panel Report which concluded that personnel cost alone to do a job on some older computers were greater than total costs to do the job on newer, more efficient systems. A management system is needed to assure that the productivity potential of computers is realized by the government.

Third, the Report does not consider the main factor in the apparent statistical reduction in the level of "fully competitive procurements". Most automated government functions today must accommodate two or three complete changes in computer technology during the automated system life. During the past ten years, since the passage of the Brooks Act, most operational government functions have been automated to some degree and represent a substantial economic investment by the government. Each of these systems generally has a total life of somewhere between ten and twenty years. As a result, most computer equipment acquisitions today are for the purpose of improving existing systems to achieve increased productivity and responsiveness or accommodate additional workloads rather than the acquisition of wholly new systems. Due to the rapid technological advancement, the steady decline in the cost of computer technology and the requirement to minimize the disruption of assimilating new generations of technology during the total systems life; new procurement processes must be developed which will take into account the need for system enhancement without total redesign that will accommodate both the goals and maximizing competition and the benefit of technology.

SECTION IX, RECOMMENDATIONS

Here again, the Report's focus is on providing recommendations that are designed to achieve immediate symptomatic fixes for an apparent statistical increase in "full competition" without acknowledging the need for more broad, indepth changes that will improve the acquisition, management, and utilization of computer technology throughout the government.

Recommendations Nos. 1 through 5 partially address the need for a more effective computer technology management system in government. One that focuses not only on acquisition but on management and utilization as well; as was envisioned by the Brooks Act. However, the recommendations stop short of recommending that OMB fully implement such a system. If the government is to maximize the benefits of technology and maximize competition, it is imperative that OMB exert policy leadership through the establishment of an organizational function that will serve as the focal point for the development, implementation, and execution of a comprehensive system to manage the government's vast computer resources. In discharging this responsibility, OMB should:

Develop a management system for the government's computer resource; including, long-range planning, capital investment, authorization, acquisition, utilization, and inventory management/retirement.

Develop basic policies for the procurement, management, and utilization of computers to maximize the benefits of technology and competition.

Monitor and audit the function of all elements to insure the enforcement of policy and proper management of the resource to achieve the desired objectives.

Continuously refine and modify the management system to adapt to future ADP environments.

Periodically report back to the Subcommittee on progress, findings and problems.

Only through the indepth, continuous involvement and planning by a central agency such as OMB, will the government ever be able to maximize the benefits of technology, its vast investment in this technology, and competition.

Recommendations Nos. 7 through 9 attempt to reduce the number of noncompetitive procurements. This is a laudable objective which should be fully supported. However, in doing so, the Report recommends constraining the current methods of improving or enhancing existing systems without acknowledging the need for a complete re-vamping of the ADP procurement process. As a result, the agencies have no reasonable alternatives with which to accommodate workload or productivity increases short of complete system replacement. In addition, the recommended two year limit imposed on interim upgrades in Recommendation No. 8 fails to recognize that it is virtually impossible to complete the fully competitive process in less than three to six years. Thus, this recommendation must be accompanied by major efforts to streamline and improve the system.

Decisions relative to interim improvement to system capacity and productivity should be based on cost/ benefit analysis rather than on preferential bias for particular sources of supply as contained in Recommendation No. 9.

Finally, Recommendation No. 19 directs that each agency request appropriations for all ADP expenditures under a single line item. While there is merit with the underlying desire to insure that Congress is aware of the actual level of ADP expenditures within each agency, this recommendation would eliminate the essential relationship of ADP expenditures to mission or program accomplishment which is the real purpose of the expenditure. The recommendation should therefore call for a requirement that each agency expand its budget justification to provide a consolidated report and explanation of all direct ADP expenditures.

SAM STEIGER.

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